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SEATTLE CITY LIGHT



Power Management Branch Overview

Advisory Board Briefing
August 19, 2003

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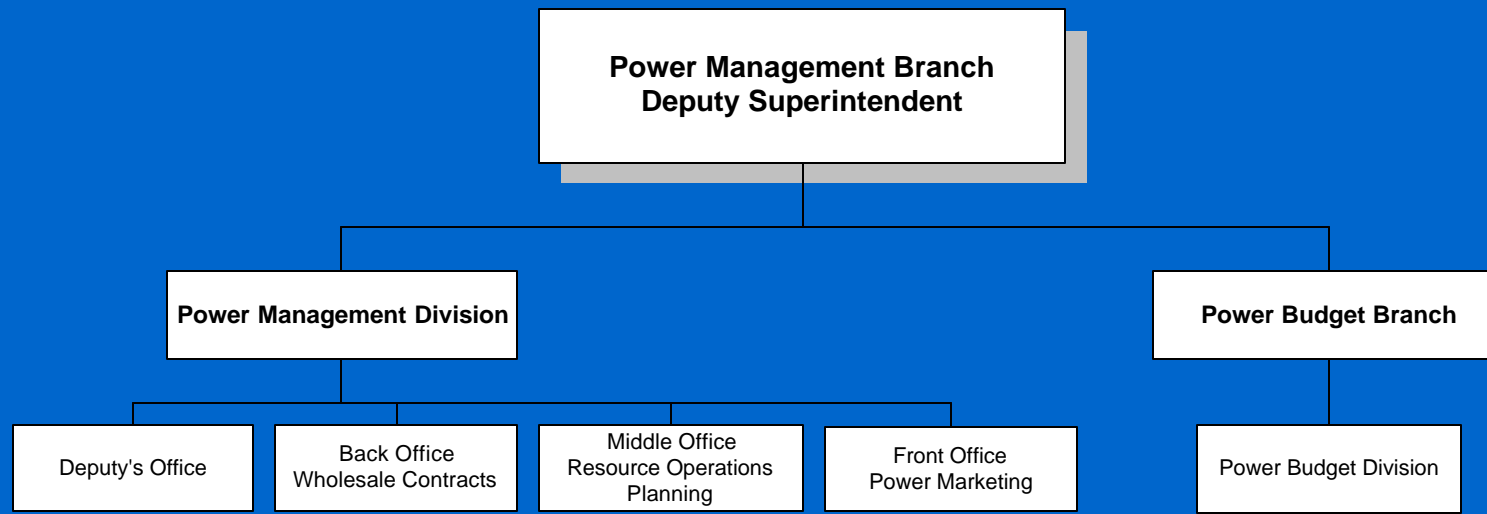
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Power Management Branch

Mission Statement

Manage Seattle City Light's Power Resource Portfolio to meet customer loads reliably, maximize revenues to help the utility maintain stable rates, and achieve City Light's goal of environmental excellence.

Organization



PMBranch 7 18 03

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Key Functions

- Meet customer loads
- Manage power portfolio
- Manage hydro river systems
- Manage SCL's share of BPA Slice project
- Wholesale purchase and sale of power, transmission, ancillary services
- Manage purchase power budget

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2003 Staffing & Budget

Staffing

- 42 staff

Budget

- \$337M power budget
- \$6.4M O&M budget

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Performance Measurement

- Mark to market
- Reliability
- License compliance
- Budget control
- Contract compliance

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Current Challenges

- Risk management
 - Price volatility
 - Hydro volatility
 - Credit issues
- Industry restructuring and changes
- Budget cuts
 - Less staff
 - Training
 - Succession planning

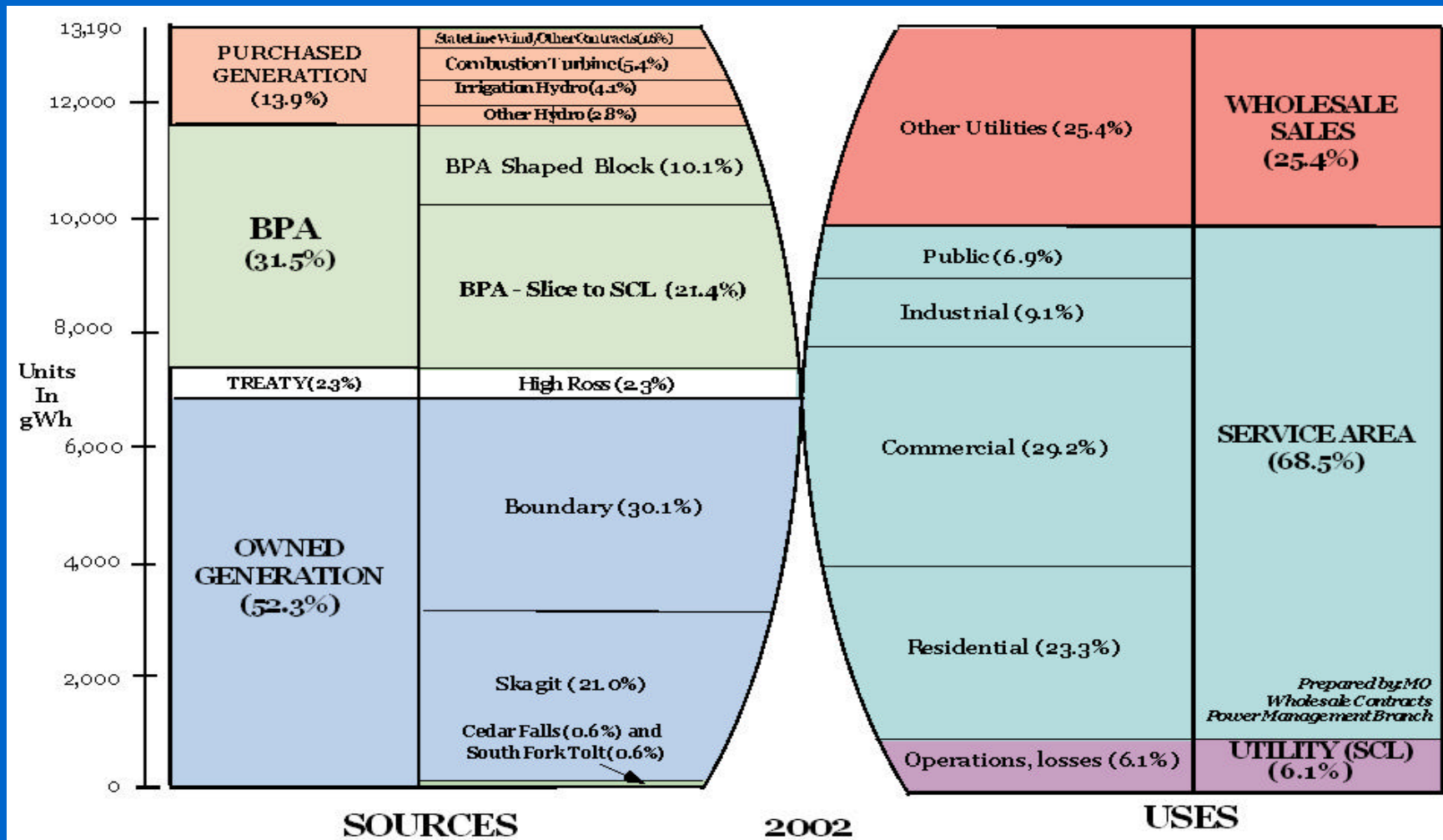
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Future Issues

- RTO West
- Regional and national policies
- Credit issues



Sources and Uses of Power



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Power Marketing (Front Office)

The Unit is responsible for real-time, short-term and long-term wholesale power marketing for the Utility. It is also responsible for the purchase and sale of high voltage transmission.

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Power Marketing (Continued.....)

- Forward power and transmission marketing
 - up to 18 months
 - under direction of the Risk Management Committee
- BPA Slice management
 - forward and daily planning
- Load forecasting
 - forecast for next day(s) and next hour
 - considerations: temperature, cloud cover, historical data, steel mill, etc.

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Power Marketing (Continued.....)

- Run of the river operation at Boundary
 - real-time operation
 - shape: generate in heavy load hours, back off on light load hours
 - recreation requirements
- Shaping at Skagit
 - fish flow requirements
 - achieve elevation targets
 - recreation requirements
 - generate at optimal price periods of day
 - Ross only storage project

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Power Marketing (Continued.....)

- Day ahead marketing
 - next day to balance of month
- Scheduling
 - meet preschedule deadlines
 - all schedules tagged
- Hour ahead marketing
 - next hour to the end of the day
- Marketing transactions
 - average 20,000 transactions per month

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Resource Operations Planning (Middle Office)

The Unit is responsible for the utility's resource portfolio planning. It is also responsible for risk management, measurement and control, and quantitative analysis of power marketing activities.

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Resource Operations Planning (Continued.....)

- Operating Plan
 - Flow Projections
 - Snow surveys
 - Precipitation reports
 - External forecasts
 - Skagit Fisheries Agreement
 - Market Price Projections
 - Maintenance Plans
 - Optimization
 - Other Resources and Contracts
-Net Surplus or Deficit

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Resource Operations Planning (Continued.....)

- Operating Plan ==>
- Risk Management Policy ==>
- Market Analysis ==>

Marketing Plan

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Resource Operations Planning (Continued.....)

- Measurement and Control
 - Position Analysis / Mark-to-Market
 - Risk Measurement
 - Value-at-Risk or Cash Flow at Risk (under review)
 - Risk Control
 - Trader Limits
 - Market Settlements
 - Skagit Project Fisheries Compliance Reports
 - Daily Minimum Release Requirements

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Resource Operations Planning (Continued.....)

- Quantitative Analysis
 - Forward Curve Development
 - Structuring and Pricing Analysis
 - Scenario Analysis

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Wholesale Contracts (Back Office)

The Unit is responsible for managing the utility's wholesale power and transmission contracts. It is also responsible for approving payments and billing of wholesale power and transmission transactions, and reporting power system and wholesale accounts information.

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Wholesale Contracts (Continued.....)

- Manage Wholesale Power Supply and Transmission Contracts (250 active agreements)
 - Negotiate new long-term agreements and amendments
 - Support contract negotiations initiated by other Divisions
 - Review and approve contract language for short-term power transactions
 - Maintain contract records

Wholesale Contracts (Continued.....)

- Wholesale Power Budget Management and Wholesale Accounts Billing
 - Manage Power Budget (\$337 M 2003; \$356 M 2004)
 - Review and approve invoices for payment and issue billing requests (1200+ per year)
 - Report wholesale expenditures/revenues (100+ reports per year)
 - Credit limit monitoring

Wholesale Contracts (Continued.....)

- Power Systems Information (1100+ reports per year)
 - Collect historical load and resource data
 - Periodic internal reports (900+ per year)
 - Regulatory and regional reports (FERC, NERC, WECC, NWPP, USGS, Corps of Engineers, PNUCC; 160+ per year)